

SCIENCE and INVENTION

LEAVES END ON YOUR CIGAR

Invention of Brooklyn Man That Possibly May Add Greatly to Comfort of Man Who Smokes.

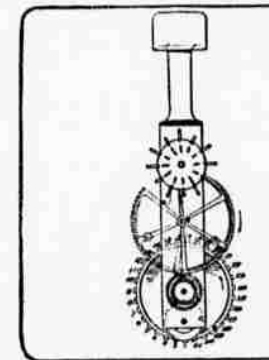
There is a possibility that before long the smoker will not have to cut or bite the end off his cigar, says the New York Times. A patent has just been awarded to a Brooklyn man on a device which inserts a cigar into the end of the cigar which goes in the mouth an aluminum spring about a half inch long. This spring is inserted diagonally and the coils are said to force the filler tobacco apart so that the cigar draws much better, than when the end is cut off. This spring is left in the cigar while it is being smoked. It is said to be especially useful in "short filler" cigars and to stop smokers from chewing on them to get a better draft. It is contended that cigars so equipped are more sanitary than others in that it does away with the need of using public cutters in the stores. Neither will the wrapper show the tendency to unroll that is common in some cigars after the end has been removed. The inventor of this machine claims that it will perforate and insert springs in 10,000 cigars a day and will require only one operative to do the work. The commercial value is said to depend on the willingness of the smoker to pay a little more for these cigars to offset the additional expense incurred by the manufacturer.

DATING MACHINE FOR BANKS

Apparatus, Invented by Kansas Man Has Wheels for Stamping Years, Months and Days of Month.

The Scientific American in describing a dating machine, invented by E. E. Gregory of Central City, Kan., says:

Mr. Gregory's invention relates to dating machines, particularly for use in banks, real estate and loan offices, and more particularly to an apparatus



Dating Machine.

embodying stamping wheels for the years, months, and days of the month, having means for advancing a predetermined number of days through a single actuation of a certain portion of the machine for this purpose.

Monument to Schiaparelli.
The king of Italy has given his sanction to the movement to erect a monument by popular subscription to the memory of the late Prof. Giovanni Schiaparelli, the distinguished astronomer. It is proposed to erect a monument to him at his birthplace, Savigliano, in Piedmont, and to place a memorial tablet in the Brera palace at Milan. He was connected with the observatory of Brera for 40 years, most of that time as a director. To the world at large Schiaparelli was chiefly famous for his discovery of the so-called "canals" of Mars in 1877.

NOTES OF SCIENCE AND INVENTION

The average watch is composed of 175 different pieces.

A "feathering propeller" has been made for dirigibles.

Geneva is building a natural history museum at a cost of \$230,000.

Horse hair automobile tires have been patented by a French inventor.

There are 28 pounds of blood in the body of an average grown-up person.

Diamond production in German Southwest Africa is reported unusually large.

A motor driven aerial propeller, placed in front, draws a sled invented by a German engineer.

X-ray apparatus has been invented for killing the tiny parasites that eat small holes in leaf tobacco.

Included with recently patented sun goggles is a shade to save a wearer's nose from being sunburned.

The government of Uruguay has organized an institute of geology, with an American director and assistants.

Delicate apparatus to measure and record the growth of plants has been invented for the use of plant scientists.

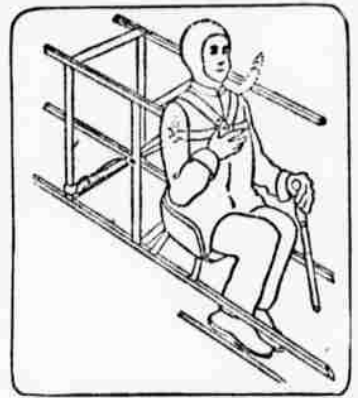
Battleships of the United States navy will be equipped to assist city fire departments in fighting fires near city water fronts.

A new type of German hot-water bottle is made of metal, hinged in the middle, and so shaped that it can be fitted to the curves of the body and limbs.

HARNESS FOR THE AVIATORS

Safety Device Made of Leather Straps Can Be Released in Few Seconds—Other Good Features.

A safety harness for aviators has been patented by a New York man, and it has some very good features. Straps fit around the aviator's shoulders and chest, the latter straps, of course, passing under his arms. These straps are buckled to the framework of the aeroplane and hold the operator securely in his seat. The entire harness is joined at one point, in the center of the wearer's chest, and can be opened instantly by pulling out a pin that holds the ends of the straps together on the stud. This feature is



Aviator's Harness.

practically as important as the primary purpose of the harness, for there sometimes arise emergencies when it is imperatively necessary for the aviator to leave his machine without ceremony, and instant freedom is vital.

EFFECTS OF LIGHT ON EYES

No Actual Data to Prove That Artificial Light Is More Discomforting Than Daylight.

Not all the radiant energy which enters the eye is active in the process of producing the sensation of light. No doubt it is fair to assume that at least this "inactive" energy is absorbed by the eye media and transformed into heat, says the Electrical World. This should cause an increase in temperature in the eye, which has led some to hold that this is the cause of irritation and fatigue. There is a general feeling that artificial light is more fatiguing than daylight, which contains far less energy per lumen-second than the light from ordinary artificial illuminants. Of course, it is true that artificial light under the same conditions of diffusion, intensity, surroundings, retinal adaptation, etc., is really more irritating and fatiguing than daylight. It is wise to look to the spectral character of the radiation as a probable cause. However, there are no actual data which prove that artificial light is more discomforting than daylight when all conditions excepting the spectral character of the radiation are the same.

PISTOL SHAPED FLASHLIGHT

Handle Serves to Carry Battery While at End of Barrel is Placed Lamp and Reflector.

The latest novelty in the flashlight line is this device in the form of an automatic pistol body. The handle serves to carry the battery while at the end of the barrel is a battery lamp



A Novelty Pocket Light.

and reflector, says the Popular Electricity. The trigger is the switch by which the light is controlled.

Sugar as Antiseptic

The use of sugar as a surgical antiseptic is strongly recommended by Dr. George Magnus of Munich, an eminent surgeon. All saccharine substances are good for this purpose, but pure cane sugar or beet sugar is best. Its disinfecting and sterilizing qualities are excellent. It is not injurious to the blood, as has been wrongly believed, and is a better preventive of putrefaction and contamination by microbes than ordinary medical antiseptics.

Warning for Balloonist

To warn a balloonist if his air craft is rising or sinking there has been invented a vertical tube, containing a horizontal fan which rings two bells of different tones as air enters the tube from above or below.

Disposing of Dead

To solve the problem of disposing of the dead a famous German architect proposes to erect in the chief cities immense pyramids, each of which would hold the ashes of 1,000,000 cremated bodies.

Restore Historic Palace

The School of American Archaeology has restored the historic palace of the governors at Santa Fe, N. M., which was erected in 1605 and was occupied as the home of government officers during the Spanish regime in the southwest.

Ancients Lived on Sand

From the fact that the teeth in the skulls of prehistoric men that have been found in Europe from time to time are much worn, a French scientist has drawn the conclusion that they lived upon food much contaminated with sand.

Focusing Binoculars

In focusing binoculars the tubes should be extended to their limit before placing to the eyes and then adjusted, for if extended afterward an optical nerve strain is caused that sometimes results seriously.

Novel Bed Mattress

A novel bed mattress is ventilated through the sides, being composed of more than 1,000 separate spiral springs.

FARMER SLOAN'S GIRL

By AUGUSTUS GOODRICH SHERWIN.

"This young Edwards burned down my barn out of malice and I'm going to make him pay for it!" snarled Farmer Sloan.

"He didn't do it at all," dissented Mrs. Sloan quite as positively, "and you ought to be ashamed of yourself for basing the reputation of a worthy, respectable young man."

"Oh, so you're on his side, too, like that rebellious, self-willed daughter of ours, eh?" sneered Sloan wrathfully. "Fanny how these slick young fellows pull the wool over the eyes of simple women! Mary's hero is no more than a common firebug, and if I catch him I'll put him in jail!"

"You'll know better and be sorry for this some time," declared Mrs. Sloan, wiping a tear from her eye with the corner of her apron as she thought of her anxious, nearly heart-broken child.

"See here, wife," orated her self-opinionated husband, "this Edwards chap was a stranger and I don't trust strangers until I weather 'em through and through. He fitted here and now he's fitted away, leaving me a thousand dollars the loser. The night he left I'd pretty plainly told him he couldn't come snooping around our Mary any more. What did he do? Out of revenge burns down my barn."

"You don't know that."

"Guess I do. Right near it we found his matchbox, marked with his name. The squire says there's evidence enough, even if Edwards hadn't run away that very same night, afraid to stay and face the music."

Mrs. Sloan was silent for a minute or two. Then she sighed deeply, for she had a warm spot in her heart for the cheery, careless young fellow who had come a-wooing Mary. Then she said:

"That stubborn, willful nature of yours will never change, I guess, Ezra. Your enmity for this young man is of a piece with the way you treated



A Great Form Clothed in White.

poor old Peter. You knocked him down the day of the fire and he has left the town, too."

"I tried to knock some of the liquor and stupidity out of the old varmint," retorted the farmer. "Good riddance, for he'd got too lazy and muddled to work."

All Millwood was talking about Farmer Sloan and his experience with his daughter's suitor and the burned barn and the mysterious disappearance of young Hal Edwards. The latter had come to the village a stranger about three months previously. He had secured a modest position in the office of the local implement works, had met Mary and they had gone to gether a good deal until the whimsical, harsh-natured old farmer had interfered. The night of the fire there had been a scene and Sloan had insultingly sent the young, penniless adventurer, as he called him, about his business.

Sloan was well-to-do but miserly and grasping. He was in a constant turmoil with his neighbors, and usually deeply involved in litigation. He had advertised in the local paper a reward for the apprehension of young Edwards.

"I've settled his hash!" he chuckled maliciously to his wife. "He'll never have the face to come back here and that saves Mary from a fortune hunter."

"I don't know about that," demurred the sensible housewife. "Mr. Edwards is a gentleman and perhaps he has gone away to bring back the proofs of it to you."

"Pooh!" derided Sloan. "He got mad and burned me out from revenge and has made tracks, like the miscreant he is."

The very next day the quarrelsome old tyrant got into a new entanglement. Every farmer whose land bordered on Lily lake kept a small boat. They were usually crude weather-worn skiffs, and anybody and everybody welcome to use them for rowing or fishing, provided they returned them in good order.

Farmer Sloan found his boat missing. A search discovered it drifted ashore two miles away and the oars gone. He made some inquiries to learn that Nelson Dye, a neighbor's son, was responsible for the circum-

Really Had the Best of It

A southern negro put up a sign on his place, "For Sale." He was ridiculed, and changed it to "Well," and finally tried a third time, his sign reading "Sally." It had not been up an hour when an old colored man came along and queried: "Does you mean dat dis place am fur Sally? What yer gwine to giv' de place to Sally fur?" "Am you findin' fault wid dat sign?" asked the other. "Well, I don't quite catch on to be spellin'." "You don't, eh? Has you got eeben hundred dollars to pay

cash down fur dis place?" "No, sah." "Den you pass on, an' shet up! Maybe I don't spell just de same as you do, but I've got prospects of handlin' seef hundred dollars, while you got bof knes out to de weddah. Go 'long, ole man; yo' too fly on Jogerly."

The next night mysterious lights were seen on the island. Recently many farmers had found their chickens on roasts and pantries despoiled. Did these thefts connect with "the ghost?" A group of boys made up an expedition to visit the island and rout out its uncanny guest.

That very day, however, a new sensation obscured and eclipsed the circumstance of the haunted island. Hal Edwards returned to town. He was promptly arrested by a constable, to whom Sloan instantly paid the advertised reward. In some way Hal secured bail and the case was set for a few days later. Sloan came home before the release, elated and excited.

"Well, wife," he pronounced with a gleesome chuckle, "we've got the villain! I hope Mary will forget him after this disgrace. Where is she? I want to give her a sensible talking to."

"You are too late," said Mrs. Sloan gravely. "Mary has left the house."

"What! do you mean—not for good?"

"I do mean just that and so does she," asserted Mrs. Sloan steadily. "Mary heard of your last persecution of the man she loves, packed up her things, has gone to my sister's house and says she will marry Hal Edwards the minute he asks her."

Ezra Sloan fumed and stormed. He'd see about this, now! He'd soon have that independent young rebel back under the home roof! And then some quiet, sensible advice from his wife quieted him down considerably.

"Mary had taken a firm stand," said Mrs. Sloan. "She is in the right and you won't move her. The girl has some of your strong, stubborn will, Ezra Sloan, only in a different way."

Farmer Sloan passed an uneasy night. When he got to the court house the next day he felt more than sheepish, when at the start it was proven that Edwards had lost the match case a week previously somewhere about the farm. Then there was a great commotion outside of the court rooms. A mob of boys hustled a shuffling, cowering figure into sight.

They were the expedition that had gone to explore the mysteries of "the haunted island." It was old Peter, ragged and terrified, whom they brought in as a captive.

"I'm the ghost. I'm the one that's been stealing my living along the river for a week!" confessed the frightened old man. "I set fire to that barn accidentally and got scared and hid away."

"And I went to see my father, who can well afford to provide a home for Mary and me, and we're going to be married tomorrow," announced Hal to Mrs. Sloan.

There was a bright, happy wedding, to which Ezra Sloan humbly consented—but he took a back seat among the guests.

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HAS SUSPICION OF "GRAFT"

Automobilist Not Sure, But He Can't Quite Get the Idea That He Was "Done" Out of His Head.

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Farmer Sloan found his boat missing. A search discovered it drifted ashore two miles away and the oars gone. He made some inquiries to learn that Nelson Dye, a neighbor's son, was responsible for the circum-

stances. Sloan met the boy, who, scared faced, acknowledged it. Sloan gave him half a dozen cuts with a horsewhip and he and the father of the lad had a regular fistfight battle later on.

Young Dye told a story that stirred up the town mightily. He had used the boat to visit Swamp Island, a marshy, densely overgrown island in the middle of the lake, to get some cattails to be used in decorating the schoolroom.

Upon landing, the terrified lad had been startled by frantic yells. A great form clothed in white and waving blazing firebrands had chased him to the boat. It was a "ghost," and half-crazed with fear at the sight of the dreadful apparition the boy had upset the boat and swam for his life to the mainland.

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WIT and HUMOR



MEN GREW UP WITH THE JOB

Neighbor Explains to Mrs. Timkins How Contractor and Assistants Got into Little Wagon.

Mrs. Timkins was telling her neighbors how she had been betrayed. "You know," she said, "we had that man up from Newark to look at the big dead tree that's going to fall some day and cut through our house, starting at the roof and not making any stops till it reaches the cellar."

"He estimated that it was about fifty feet to the first branch, and he talked as though he had ladders, derricks and hawsers enough to move the Washington monument."

"Then he went away and wrote us a letter making a bid on the job. We accepted the bid. Then a month went by."

"Yesterday he came in a little wagon about two by four, scarcely more than a baby carriage. He had some ropes and four men besides himself. But no ladders. When he found that none of his four men would climb up the first branch and fasten the rope, he said he couldn't take the tree down."

"His ridiculous little wagon! I don't see how those five men ever got into it, even themselves."

"Maybe they were boys when they started," said Neighbor Jones.—New York Evening Post.

His Growl

"A man ought to know when to say no."

"You know when to say no, all right."

"Thank you. I think I do."

"Yes, you said no when you felt sure I would ask you again. And you said yes when you saw me beginning to weaken."

Just the Same

"I met Dunkey today for the first time for years. He hasn't changed much."

"Oh, he hasn't changed at all, but he doesn't seem to realize it."

"How do you mean?"

"Oh, he's forever talking about what a fool he used to be."—Stray Stories.

Soul Stuff

"And now the ladies are to wear gowns to fit the soul!"

"It is a good thing the men are not to wear a garb to fit their souls."

"Now, I wonder why you—"

"Anything to fit your soul would not be bigger than a beauty patch."

Deadly Stuff

"Dobbs seems to be in high good humor."

"He's made a great discovery."

"Will it benefit science?"

"It may benefit the medical profession. He has found a place where he can buy mince pie two inches thick."

Altogether Conversational

"Any battles lately?" asked one Mexican journalist.

"Not exactly," replied the other. "Nothing more than a skirmish."

"Have you all the details?"

"Of course not. I don't write shorthand."

HARD LINES

Critic—The first line of your new poem will appeal to everyone who knows you.

Poet—Indeed.

Critic—Yes. It reads, "I would that I were dead."

Putting His Foot in It

Miss Mugg—You wonder who that homely looking man is, do you? Well, he happens to be my brother.

Mr. Mixt—Oh, pray excuse me. I should have known it by the resemblance.—Boston Evening Transcript.

The Solitary Occasion

"I never knew old Simpson acknowledge that he had made a mistake."

"Ah! I did once."

"Really. How did it happen?"

"He put the lighted end of his cigar in his mouth."—London Tatler.

Just Like Old Times

"That young Rawlings stays till a very late hour, Nora. What does your mother say about it?"

"She says men haven't altered a bit, pa."—London Opinion.

The Goat

Visitor—I understand that you are the responsible person in this office.

Drudge—No, I ain't. I'm just the one that's always to blame for everything.—Joke.

DEFINITION IS QUITE CLEVER

Earth Is Somewhat Larger Than a Baseball, but Not So Important—Is Splendid Summer Resort.

The earth is a ball, so situated in a region called space as to get the full benefit of the sun on bright days and of the moon on romantic nights. It is somewhat larger than a baseball, but not so important. It is not so large as a fixed star, but is much closer and of a much pleasanter climate. It is not so flashy as a charity ball, but much more efficient.

It has two poles of which we are certain, because they are vouched for by explorers; a center of which we are not certain, because it is vouched for merely by scientists; an equator and an axis, which are imaginary; Christian Scientists, which are imaginative, and mathematicians, which are unimaginative. It is inhabited by people, husbands and other insects, animalcules and bacteria. It is connected with the rest of space by sound waves, light waves, wireless apparatus with instruments at the sending end only, telescopes and prayers. It has recently endeavored to exaggerate its ego by the use of aeroplanes.

The earth is highly recommended as both a summer and a winter resort for well-to-do persons. Favorable terms to desirable parties.—Pittsford's Magazine.

NATURAL EFFECT

"Your friend Banks has a very supercilious air. What makes him hold his nose so high?"

"He can't help it, dear boy. He's an official egg inspector."



Everything Depends.
Tommy—May I sit up a little longer?
Ethel—What do you want to stay up for?
Tommy—I want to see you and Mr. Green playing cards.
Mr. Green—But we are not going to play cards.
Tommy—Oh, yes, you are, for I heard mamma saying to Ethel that everything depended on the way she played her cards tonight.—Liverpool Mercury.

The Merry Life

Some young folks have odd ideas of the life theatrical.

"My, but I'd like to travel on the road with a company," said a young man the other day.

"What would you like most about such a life?" his companion asked.

"I think it would be great," the ambitious one exclaimed, "to sit about the railroad stations playing a banjo and singing songs until the train arrived."—Youngstown Telegram.

The Time He Scored

Six years later he returns. His sweetheart of former years has married. They meet at a party. She has changed; between dances the recognition takes place.

"Let me see," she muses, with her fan beating a tattoo on her pretty hand, "was it you or your brother who was my old sweetheart?"

"Really, I don't know; probably my father."

Not So Bad

"You look cheerful for a man whose chauffeur has just eloped with his wife."

"It might have been worse. It was a last year's model."

"Your wife a last year's?"

"Oh, no, no! The auto is a last year's model."

That's Different

Wyndham—Excuse me, young man, but I think your mother needs attention.

Nahrow—The lady is my mother-in-law.

Wyndham—Oh! I beg your pardon.—Judge.

Rare Find

"Here's a good joke from a London newspaper."

"You don't seem very much excited about it."

"Why should I be excited?"

"Didn't you say it was good joke from a London newspaper?"

Enough to Irritate Him

"A woman in Pittsburgh says her husband has beaten her 2,050 times."

"Well, can you blame the poor man? Think of having a wife so stubborn enough to keep the exact score!"

Cheaper to Hire a Taxi

"Biffels is always buying suburban lots, what in the world is the matter with him?"

"Oh, he can't resist the free automobile rides offered by agents."